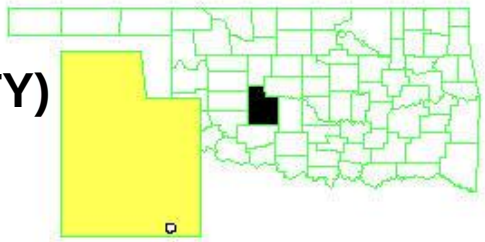
OKLAHOMA REFINING COMPANY (CADDO COUNTY) OKLAHOMA



EPA REGION 6
CONGRESSIONAL DISTRICT 3

Contact: Michael A. Hebert
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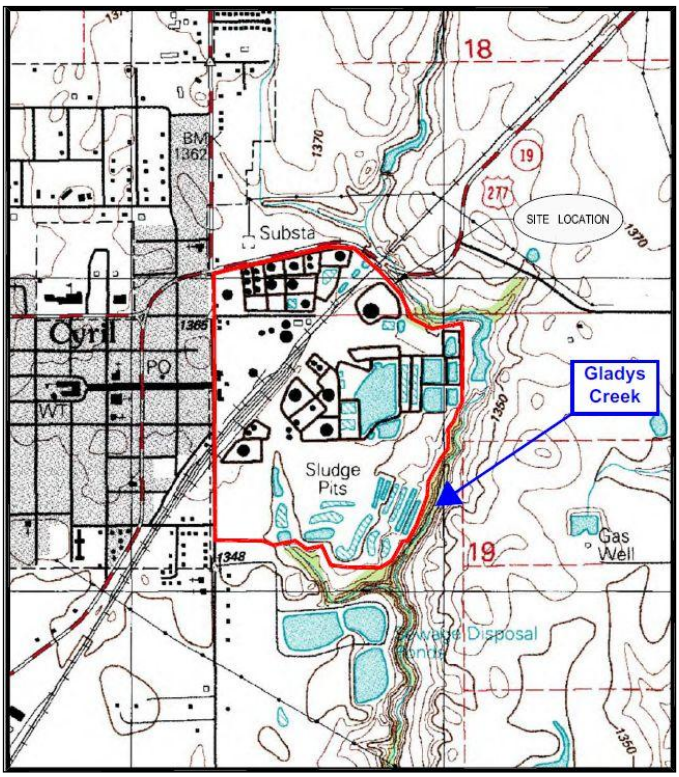
EPA ID# OKD091598870
Site ID: 0601172

Updated: August 2012

Background

The Oklahoma Refining Company (ORC) site is located at the intersection of U.S. Highway 277 and State Highway 8 in Cyril, Caddo County, Oklahoma. Gladys Creek adjoins the site along its northern and eastern borders.



The ORC site covers approximately 160 acres. Operations at the site were begun by the Anderson Pritchard Company (APCO) in 1920. The ORC site was operated as a refinery, under several different owners, until about 1984. The refining processes that were utilized included crude distillation, vacuum distillation, catalyst cracking, akylation, bimetallic reforming, and downstream processing. Wastes were placed in surface pits on the refinery property. Wastewater was sent through an oil-water separator to remove oils and then treated in a series of surface impoundments. Treated water from the surface impoundments was discharged into Gladys Creek. Site operations resulted in contamination of soil, sediment, surface water, and shallow ground water beneath the ORC site. Approximately one-half of the ORC site formerly consisted of a refinery area and a tank farm area. The other one-half of the site, formerly consisted of grasslands and approximately 50 randomly-sized pits and wastewater ponds containing varying amounts of sediment.

The contaminants present at the ORC site included benzene, phenol, toluene, xylene, methyl phenol, naphthalene, ethylbenzene, polycyclic aromatic hydrocarbons, arsenic, cadmium, chromium, lead, mercury, nickel, and zinc as well as areas of low and high pH.

Approximately 1,600 people on public or private drinking water wells live within three miles of the Site, with the closest well (private) within 1000 feet of the Site.

The ROD for the site was signed on June 9, 1992. The ROD addressed the risks posed by the site to

human health and the environment. The selected remedy consisted of treatment of soil and sediment present at concentrations above the RAOs using bioremediation, stabilization, neutralization and containment and treatment of surface water and ground water. In July of 1997, the surface water, soil, and sediments remediation in the southern portion of the site were completed. Landfills constructed to contain treated wastes are fenced to prevent unauthorized access, and the remaining areas are used for cattle grazing. In both 1996 and 2003 the ground water remedy was postponed as explained in Explanation of Significant Difference documents associated with the Record of Decision. In August 2003, the EPA Emergency Response Branch demolished and removed the refinery structures, tanks, and chemicals from the northern portion of the site.

The completed remedy of the southern portion of the site included the bioremediation of approximately 93,000 cubic yards of contaminated soil, neutralization of 16,000 cubic yards of contaminated soil, stabilization of 14,000 cubic yards of contaminated soil, and removal of 19,771 cubic yards of soil contaminated with asphaltic waste and 18,260 cubic yards of soil contaminated with pitch.

Current Status

The EPA completed a Second 5-year review of the site on August 17, 2007. The review indicated the remedy is protective in the short term.

August 2003 - EPA initiated an emergency removal action on the northern portion of the Site to address drums, lab chemicals, and access controls.

September 2003 - EPA initiated a time-critical removal on the northern portion of the Site to address demolition of various process towers, vessels, buildings, cooling towers, above ground piping, sumps, above ground storage tanks, and asbestos containing materials from pipes and vessels.

The ODEQ is currently implementing a ground water monitoring plan in order to evaluate the condition of ground water at the site, now that all contaminated soil, sediment, and surface water on the southern portion of the site have been addressed.

The ODEQ has initiated development of a Revised Feasibility Study in January 2010 to evaluate remedial alternatives for remaining contamination at the site.

The ODEQ has initiated a Third Five Year Review which is scheduled to be completed in 2012.

Benefits

- Approximately 153,000 cubic yards of contaminated soil and sludge have been addressed by the selected remedies.
- The property is suitable for certain types of redevelopment.

National Priorities Listing (NPL) History

NPL LISTING HISTORY
Site HRS Score: 46.01

Proposed Date: 06/24/88
Final Date: 02/21/90
NPL Update: No. 7

Site Description

The Oklahoma Refining Site (Site) is located on South Baskett Street in Cyril in southeastern Caddo County, Oklahoma. Approximately 1,600 people on public or private drinking water wells live within three miles of the Site, with the closest well (private) within 1000 feet of the Site. The 160-acre abandoned Site was a refinery from 1920 until 1984 with wastes in approximately 50 impoundments (many unlined) and several buried waste areas. Shallow ground water beneath the Site flows away from the community and discharges into Gladys Creek at the eastern and northern boundaries of the Site. Area water supplies are provided by Rural Water District wells located several miles away from the City of Cyril and are not affected by the Site.

Site Responsibility: Oklahoma Department of Environmental Quality with EPA as the support agency.

Contacts

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Prime Contractors:	Bechtel - RI/FS; Clayton/Mittelhauser RD & RA Oversight; Philip Services Corporation - RA Construction	